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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,508	03/11/2004	Peter W. Farrett	CHA920030027US1	6406

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EXAMINER	
RAAB, CHRISTOPHER J	

ART UNIT	PAPER NUMBER
2169	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/798,508	FARRETT, PETER W.	
	Examiner	Art Unit	
	Christopher J. Raab	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

01. This action is in response to Applicant's amendment filed on September 27, 2006. **Claims 1 – 15** are pending in the present application. **This action is made FINAL**, as necessitated by amendment.

Claim Objections

02. Claims 2 and 12 are objected to because they mention that "the search history comprises a table of previously..." but claims 1 and 11 have been amended to now read as, "a search history table". As such, this part of claims 2 and 12 should be rewritten as "the search history table comprises previously".

Claim Rejections – 35 USC § 101

03. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

04. **Claims 1 – 5** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims lack a useful, concrete and tangible result within the meaning of 35 USC 101. As such they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

05. **Claims 10 – 15** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35

USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, function descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections – 35 USC § 102

06. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

07. **Claims 1 – 3, 6 – 9, 11 – 13** are rejected under 35 U.S.C. 102(b) as being anticipated by **Bowman et al. (United States Patent 6,006,225)**.

Consider **claim 1**, Bowman et al. clearly show a method for searching a database comprising steps of:

a web server, which processes user requests, received from user computers via the Internet (read as inputting a search term) (column 5 lines 1 – 4)

including queries submitted by users to search the on-line catalog for products (read as beginning a search at a random location in the knowledge base to identify the match answer) (column 5 lines 4 – 7)

the query server searches a bibliographic database that includes information about titles, authors, publishers, subject descriptions etc. and that the information is arranged within fields (read as determining a match answer category from the match answer) (column 5 lines 11 – 25)

the generation process then maps each query term found in a query and its prefix to other terms used with that particular query. A correlation score is maintained for each related term in the mapping, and is stored in a table (read as determining a look-up association based on the match answer category and a search history table, inputting the look-up association into an alternative answer probability table to identify an alternative answer category) (column 10 lines 25 – 33, figures 5A, 5B)

and that successive searches are preformed on the modified query (read as performing a secondary search at a second random location in the knowledge base to find the alternative answer that only belongs to the alternative answer category) (column 13 lines 63 – 65, column 14 lines 1 – 12, Figure 5B, 9).

Consider **claim 2**, and **as applied to claim 1 above**, Bowman et al. clearly show a method such that the query server includes a related term selection process which identifies related query terms based on query term correlation data stored in a correlation table (read as the match answer category and the alternative answer category form a category answer association, and the search history comprises a table of previously determined category answer associations) (column 5 lines 26 – 32).

Consider **claim 3**, and **as applied to claim 2 above**, Bowman et al. clearly show a method such that the search engine uses the query term correlation data stored in the correlation table to select the related terms that best match the user's query (read as the alternative answer probability table is determined from the search history table) (column 6 lines 19 – 22, Figures 5A, 5B).

Consider **claim 6**, Bowman et al. clearly show a user preference search system comprising:

A web server application, which processes queries submitted by users to search the on-line catalog for products (read as a search engine that performs a first search at a first location in the knowledge base and returns a match answer) (column 5 lines 4 – 7).

Successive searches are preformed on the modified query (read as performs a second search at a second location in the knowledge base to find an alternative answer, wherein the alternative answer belongs to an alternative answer category) (column 13 lines 63 – 65, column 14 lines 1 – 12, Figure 5B, 9)

the generation process then maps each query term found in a query and its prefix to other terms used with that particular query. A correlation score is maintained for each related term in the mapping, and is stored in a table (read as inputting a look-up association into an alternative answer probability table, wherein the look-up association is based on a search history table) (column 10 lines 25 – 33, figures 5A, 5B)

a query server includes a related term selection process that identifies related query terms based on query term correlation data stored in a correlation table (read as a table update system that updates the alternative answer probability table based on a table of previously determined category answer associations) (column 5 lines 26 – 32).

Consider **claim 7**, and **as applied to claim 6 above**, Bowman et al. clearly show a user preference search system such that the user submits a search to search part of a database for a single item or multiple items (read as the first and second locations are determined randomly) (column 5 lines 45 – 67).

Consider **claim 8**, and **as applied to claim 6 above**, Bowman et al. clearly show a user preference search system such that a correlation score is maintained for each related term in the mapping, and is stored in a table (read as the look-up association is determined from a search history) (column 10 lines 25 – 33, figures 5A, 5B).

Consider **claim 9**, and **as applied to claim 7 above**, Bowman et al. clearly show a user preference search system such that the query server includes a related term selection process which identifies related query terms based on query term correlation data stored in a correlation table (read as each previously determined category answer association comprises a match answer category and an alternative answer category) (column 5 lines 26 – 32).

Consider **claim 11**, Bowman et al. clearly show a program product for searching a database comprising steps of:

a web server which processes user requests received from user computers via the Internet (read as means for inputting a search term) (column 5 lines 1 – 4)

including queries submitted by users to search the on-line catalog for products (read as means for beginning a search at a random location in the knowledge base to identify the match answer) (column 5 lines 4 – 7)

the query server searches a bibliographic database that includes information about titles, authors, publishers, subject descriptions etc. and that the information is arranged within fields (read as means for selecting a match answer category from the match answer) (column 5 lines 11 – 25)

the generation process then maps each query term found in a query and its prefix to other terms used with that particular query. A correlation score is maintained for each related term in the mapping, and is stored in a table (read as means for determining a look-up association based on the match answer category and a search history table, inputting the look-up association into an alternative answer probability

table to identify an alternative answer category) (column 10 lines 25 – 33, figures 5A, 5B)

and that successive searches are preformed on the modified query (read as means for performing a secondary search at a second random location in the knowledge base to find the alternative answer that only belongs to the alternative answer category) (column 13 lines 63 – 65, column 14 lines 1 – 12, Figure 5B, 9).

Consider **claim 12**, and **as applied to claim 11 above**, Bowman et al. clearly show a method such that the query server includes a related term selection process which identifies related query terms based on query term correlation data stored in a correlation table (read as the match answer category and the alternative answer category form a category answer association, and the search history comprises a table of previously determined category answer associations) (column 5 lines 26 – 32).

Consider **claim 13**, and **as applied to claim 11 above**, Bowman et al. clearly show a method such that the search engine uses the query term correlation data stored in the correlation table to select the related terms that best match the user's query (read as the alternative answer probability table is determined from the search history table) (column 6 lines 19 – 22, Figures 5A, 5B).

Claim Rejections - 35 USC § 103

08. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

> at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

09. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. **Claims 4 – 5, 10, 14 – 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bowman et al. (US Patent 6,006,225)** in view of **Pak et al (US PGPub 2004/0260534)**.

Consider **claims 4 – 5**, and **as applied to claim 3 above**, Bowman et al. clearly show the claimed invention except that natural language is used. Pak et al. however, clearly show a method to search a variety of types of documents for material related to concepts expressed in natural language text (read as the search term is extracted from a natural language input) (paragraph [0019], [0039]), and such that the data in the knowledge base can include solutions, resolutions, and pre-defined answer (read as the match answer and alternative answer are presented in natural language format (paragraph [0021]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the natural language usage taught by Pak et al. into the

search method taught by Bowman et al. for the purpose of allowing the user to input natural language for searching.

Consider **claim 10**, Bowman et al. clearly show the claimed invention except that a natural language parser is used. Pak et al. however, clearly show a system wherein the invention analyzes the natural language text (read as a natural language parser for receiving natural commands) (paragraph [0036]) to determine an underlying concept (read as generating the search term.) (paragraph [0036]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the natural language parser taught by Pak et al. into the search system taught by Bowman et al. for the purpose of allowing the user to input natural language for searching.

Consider **claims 14 – 15**, and **as applied to claim 13 above**, Bowman et al. clearly show the claimed invention except that natural language is used. Pak et al. however, clearly show a program product to search a variety of types of documents for material related to concepts expressed in natural language text (read as the search term is extracted from a natural language input) (paragraph [0019], [0039]), and such that the data in the knowledge base can include solutions, resolutions, and pre-defined answer (read as the match answer and alternative answer are presented in natural language format (paragraph [0021]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the natural language usage taught by Pak et al. into the

search method taught by Bowman et al. for the purpose of allowing the user to input natural language for searching.

Response to Arguments

11. Applicant's arguments with respect to claims 1 – 15 have been considered, but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Anick et al. US Patent 6,778,975

b) Hansen et al. US PGPub 2003/0014399

14. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Christopher Raab whose telephone number is (571) 270-1090. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

KBP

Christopher Raab
C.R./cr

October 18, 2006

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
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